

Amendments to the Specification:

Please amend the paragraph beginning on page 2, line 1, as follows:

-- The prior art shown in Figure 1 shows a container 12 that is used to test silica. It has three primary parts: a graphite base 10 having a coating 20 thereon, a tube 30 having ~~Teflon~~-TeflonTM walls (walls coated with a non-reactive coating) forming an interior cavity 32 defined by the tube 30 and a ring 40 that connects the tube 30 to the base 10. An adhesive is applied to an inner surface 42 of ring 40 to connect tube surface 34 of tube 30 to the ring 40. Additionally the inner surface 42 of ring 40 adheres to circumferential surface 14 of base 10. Because of the reactivity of the graphite base 10 with various acids, it must have the coating 20 on it. One disadvantage of the prior art is that the coating 20 is only applied to a side of the base 10 in regular contact with acid for fabrication and material cost reasons. Because the coating is only on one side of the base, the base 10, ring 40 and adhesive is often exposed to acid because the acid inside the container often spills onto the burner, laps over the edge of the container and runs down to the base, or boils over and splashes the exterior of the container. Additionally, the vapor from the acid also damages the container. The result of the contact between the container and the acid, including acid vapors, causes etching, erosion, and deterioration of the adhesive or other parts of the container, all of which may result in a catastrophic failure of the container.--

Please amend the paragraph beginning on page 6, line 20, as follows:

--The material used to make the container may be altered to have different reactive properties based on an intended use. For example, if electrolyte present in the container is nitric, nitrate, sulfuric, hydrofluoric or hydrochloric acid, a material such as R7510 manufactured by Ascarbon should be used. If an electrolyte such as perchloric acid is present, either a nonreactive coating such as ~~Teflon~~-TeflonTM should be applied to the container or a different container material that does not react with the electrolyte should be used as the material to form the container. ~~Teflon~~-TeflonTM comes in a variety of variants. Preferably a low temperature but highly adhesive ~~Teflon~~-TeflonTM or other coating such as ~~Teflon~~-TeflonTM PFA should be used. However, it is within the scope of the invention to also use high temperature

coating including other ~~Teflon~~-TeflonTM coatings. Preferably the coating should not be applied to the bottom of the container so that it does not melt or unadhere itself from the container either completely or in part.--

Please amend the paragraph beginning on page 7, line 20, as follows:

--The graphite composite that is made into the container according to the preferred embodiment of the present invention may comprise many different substances. Regardless of the composition of the graphite composite, the graphite composite preferably has properties that fall within following ranges. The graphite composite has a thermal conductivity of 30-130 W/(m*K). Preferably the range of thermal conductivity is between 80 and 120 W/(m*K). Additionally, the compressive strength of the graphite composite necessary to form the container shall be between about 70 and 170 N/mm². Preferably the compressive strength is within about 100 and 150 N/mm². The Young's Modulus of the graphite composite should be about ~~8—15*10³~~-8 to 15*10³ N/mm² and is preferably about 11.5 * 10³ N/mm². The bulk density of the graphite composite should be about 1.6 to 2.0 g/cm³ and is preferably about 1.83. Preferably R7510 is used to make the container, but there are many other composites that would be suitable and are within the scope of this invention.--

Please amend the paragraph beginning on page 8, line 19, as follows:

--Figure 2 shows the subject invention in use. Container 300 is placed on heating device 310 preferably a hot plate or burner. The hotplate ~~300~~310 typically has a heating element 314. It will preferably have a temperature control 318 and 320 and a temperature display 324. The temperature control allows the operator to adjust the temperature either up or down or even hold the temperature with a hold button 326. The heating device may be electric. An electric heating device will have an electrical cable 312 for plugging into an electrical outlet that provides electricity to the electrical heating device 310. An electrical heating device preferably has an "on/off" switch 316.--

Please amend the paragraph beginning on page 9, line 4, as follows:

-- Figures 3a, 3b and 3c show three different embodiments of the present invention. The differences in the three embodiments are based in the design of container and are based on the intended use of the container. The base ~~412~~412a, 412b, 412c of all three designs is preferably generally cylindrical or frusto-conical in shape. Sides ~~402, 404 and 406~~402a, 402b, 402c; 404a, 404b, 404c; and 406a, 406b and 406c in each respective ~~figure~~figures, 3a, 3b and 3c, are respectively connected to the ~~base 412~~bases 412a, 412b and 412c around the perimeter of the base forming a container. The angle between the ~~base 412~~bases 412a, 412b and 412c and the respective sides is defined as α_x . The shapes of the containers are cylindrical, frusto-conical, or inverse frusta-conical based on the angle α_x .--

Please amend the paragraph beginning on page 9, line 15, as follows:

-- In Figure 3b, α_2 is less than 90 degrees. Container ~~410~~420 is preferred if a material test does not require removal of contents during the preparation or test procedure. This design provides a low center of gravity, a large base and a narrow top of the container limiting splashes even without a lid.--

Please amend the paragraph beginning on page 9, line 19, as follows:

--The design of the container 430 in Figure 3c has an angle α_3 that is greater than 90 degrees. This design is preferred if a test requires removal of contents with a ladle or other similar tool. The design is especially desired if the container must have constant heat during the preparation or testing process. Another feature of this design is that base ~~412~~412c is narrower than the top.--

Please amend the paragraph beginning on page 10, line 1, as follows:

--Preferably, thickness 413413c of base 412412c is thicker than thickness 415415c of sides 414406c. This increased thickness on the bottom is for structural strength because the bottom of the container typically gets bumped, scratched and hit. The thickness 415415c of the sides 414406c is thinner than the thickness 413413c of the base 412412c to save on material costs--

Please amend the paragraph beginning on page 10, line 5, as follows:

--The sides of the container form an internal cavity. In all three designs, at an end of the sides distal from the base-side connection where α_x is formed, ~~flange 408 is~~ flanges 408a, 408b, 408c are respectively connected to sides ~~402, 404 and 406~~ 402a, 402b, 402c, 404a, 404b, 404c and 406a, 406b and 406c forming a shoulder 409. ~~The flange 408 is~~ flanges 408a, 404b and 406c are preferred so that a lid of each container may be ~~mating-~~ matingly placed on the container. The distal ends of the sides of the containers form an opening in the container so that material may be placed in and removed from the internal cavity.--

Please amend the paragraph beginning on page 10, line 22, as follows:

--In Figure 4a, a handle 500 is shown having a first end ~~202~~ 502 and a second end 204504. The first end 202502 is connected to the container preferably to the sides. The second end may be connected to the sides or it may not be as shown in Figure 4d.--

Please amend the paragraph beginning on page 11, line 2, as follows:

--Another type of handle is a removable handle 206. Two types of removable handles are shown in Figures 4b and 4c. In Figure 4b, the removable handle 600 comprises a first piece 208608 and a second piece 210604 that are connected at pivot point 214606. Each of the first piece 208602 and the second piece 210604 have a first end 218608 and a second end 220610. Between the first end 218608 and the second end 220610 is a pivot point connection.

At the pivot point connection is the pivot point 214606 through which the first piece and second piece are connected so that an openable claw 216612 is formed. The claw 216612 fits around the container. The second ends 220610 of the first and second pieces ~~208~~, 210602, 604 form a handle 200600 to move the container. A spring 212614 is operably positioned so that the ends 218608 and 220610 are biased apart. The spring's resistive force may be overcome so that the claw opens wider than the tube thus allowing the handle to be removably attached. The claw 216612, biased closed by the spring 212614, fits under the flange or lip of the container so that the container is prevented from slipping not only by friction but also the engagement of the lip with the claw. Similarly, Figure 4c shows a two part handle 700 that engages one piece 210702 under the flange 201704 or lip. The second piece 208703 is positioned over the flange 201704. The second piece is formed so that it holds the first piece 210703 under the flange 201704.--

On page 11, before the paragraph beginning on line 18, please insert the following paragraph:

--Figure 4d shows another embodiment of a handle 850 having first end 852 and second end 854.--

Please amend the paragraph beginning on page 11, line 18, as follows:

--Figure 5 shows a top view of container 300800. It is clear from this view, the flange 408802 is connected to the distal end or top of sides 352804 of container 300. Preferably a spout 302806 is integrally formed in to container 300800 when the material is being formed to make the container. The spout may be a variety of shapes and designs that facilitate the pouring of contents of container 300800 from the container 300800 without spilling. In order to limit drips, a sharp edge 301808 should be formed into spout 302806.--

Please amend the paragraph beginning on page 12, line 1, as follows:

-- Figures 6a and 6b show one embodiment of the container wherein container 500900 is equipped with a lid 502902. Preferably, the lid is removably attached to the container 500900. The lid may be merely set on the container or preferably locked onto the top of the container through a C-channel shaped and flange connection. In this embodiment, lid 502902 has a C-channel formed on at least one edge. It is undesirable to have the C-channel formed around the lid's entire perimeter. The flange 408904 is connected to the sides of the container 500900. Preferably, flange 408904 is formed integrally with container 500900 when container 500900 is formed. The lid 502902 may be square, as shown in Figure ~~6b~~6a or any other shape that performs the same function. The lid 502902 slides onto flange 408904. Preferably, if the lid 502902 is square-shaped, the lid shall have C-channels on ~~3~~three sides. If the lid is generally round, the lid preferably has a V-shaped C-channel. By having the channels, the lid is less likely to fall off than a lid that is simply placed on the container. Additionally, the lid may be placed on the container from a plurality of starting positions not just from a direction generally opposite the spout. A lid helps prevent sloshing over, boiling over and splatter by reducing communication from the internal cavity to outside the container. It is also within the scope of this invention to vary the attachment mechanism of the lid to the container as well as putting the flange on the lid and the C-channel on the container.--